

Appendix table 1-8

High school graduates completing advanced mathematics courses, by student and school characteristics and subject: Selected years, 1990–2009

(Percent)

Student and school characteristic	Algebra II	Trigonometry and statistics/ probability	Pre-calculus/ analysis	Calculus	AP/IB mathematics <sup>a</sup>
1990 graduates	53.0	16.2	13.7	7.2	4.4
2000 graduates	67.4	20.2	26.6	12.5	9.5
2005 graduates	70.3	24.4	29.5	14.4	12.3
2009 graduates	75.6	29.9	35.3	16.8	15.2
Sex					
Male	73.5	29.4	33.9	17.0	15.1
Female	77.7	30.3	36.7	16.7	15.2
Race/ethnicity <sup>b</sup>					
White	77.2	32.3	38.0	18.6	16.0
Black	70.7	26.0	22.7	6.6	6.5
Hispanic	71.2	20.1	26.5	9.2	9.4
Asian/Pacific Islander	82.8	38.6	60.5	43.6	42.1
Community type					
Urban	74.6	29.0	36.7	16.2	17.6
Suburban	78.6	34.2	39.0	20.4	17.6
Rural	74.4	25.7	30.1	14.3	10.6
School size (enrollment)					
Small (1–499)	72.8	27.6	26.2	14.6	5.5
Medium (500–1,999)	76.3	31.8	36.4	17.7	15.5
Large (≥2,000)	78.7	28.1	38.3	16.7	19.5
School poverty rate <sup>c</sup>					
Very low	81.8	34.6	48.5	28.7	22.9
Low	79.0	36.7	41.3	21.8	20.8
Medium	74.7	26.7	29.8	12.7	12.3
High	69.5	24.3	25.4	9.6	9.7

AP = Advanced Placement; IB = International Baccalaureate

<sup>a</sup>AP/IB courses are reported separately in this column but also included in other columns. For example, calculus includes any calculus course, including AP calculus.

<sup>b</sup>American Indian/Alaska Native students are included in the total but not shown separately due to small sample sizes.

<sup>c</sup>School poverty rate is defined by the percentage of students eligible for national free/reduced-priced lunch program: very low = ≤5%, low = 6%–25%, medium = 26%–50%, and high ≥ 51%.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, special tabulations (2011) of National Assessment of Educational Progress 1990, 2000, 2005, and 2009 High School Transcript Studies, National Center for Education Statistics.